

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96

[$\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; $^{\circ}\text{C}$, degrees Celsius; mg/L, milligrams per liter; col/100 mL, colonies per 100 milliliters of water; $\mu\text{m}-\text{mf}$, micron-membrane filtration; $\mu\text{g}/\text{L}$, micrograms per liter; pci/L, picocuries per liter; PCB, polychlorinated biphenyls; PCN, polychlorinated naphthalene; --, no data; <, less than; >, greater than; E, estimated; K, nonideal count]

Date	Time (24-hour)	Dis- charge, instant- aneous (cubic feet per second)	Specific conduct- ance ($\mu\text{S}/\text{cm}$)	Specific conduct- ance laboratory ($\mu\text{S}/\text{cm}$)	pH, water whole, field (standard units)	pH, water whole, laboratory (standard units)	Temper- ature, water ($^{\circ}\text{C}$)	Alkalinity, laboratory (mg/L as CaCO_3)	Oxygen demand, chemical, high level (mg/L)	Calcium, dissolved (mg/L as Ca)	Magne- sium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
06820464 Quarry Creek at Missouri River, Fort Leavenworth, Kansas (lat $39^{\circ}21'13''$ N, long $94^{\circ}54'44''$ W, fig. 2)												
Low flow												
SEPT. 1994												
14...	1100	0.21	1,070	--	7.8	--	22.0	274	12	140	26	52
AUG. 1995												
10...	1125	.35	1,040	1,020	7.6	7.7	26.0	276	10	130	25	43
MAR. 1996												
13...	1300	.21	952	962	8.3	8.2	14.0	265	25	120	24	46
AUG.												
26...	1040	.84	1,040	1,040	7.8	7.8	21.0	275	<10	150	24	39
Storm runoff												
NOV. 1995												
01...	0945	--	404	401	7.6	7.5	--	105	46	44	7.2	18
MAR. 1996												
24...	1700	--	830	796	7.4	7.2	--	178	90	81	18	55
APR.												
22...	0045	--	--	--	--	--	--	--	110	--	--	--
MAY												
23...	0440	--	836	833	7.8	7.1	--	--	69	86	16	48
AUG.												
19...	2315	--	--	943	--	7.7	--	247	23	120	21	42
22...	2215	--	--	410	--	7.3	--	117	56	44	8.7	16

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Potas-sium, dissolved (mg/L as K)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 °C dissolved (mg/L)	Residue total at 105 °C, suspended (mg/L)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, nitrite plus nitrate, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phos-phorus, total (mg/L as P)
06820464 Quarry Creek at Missouri River, Fort Leavenworth, Kansas (lat 39°21'13" N, long 94°54'44" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	3.5	150	99	0.2	26	702	11	0.04	1.9	0.13	0.30	0.11
AUG. 1995												
10...	3.5	150	79	.3	25	692	48	.07	1.9	.18	.70	.18
MAR. 1996												
13...	4.0	150	79	.4	13	622	6	.01	.61	<.015	.50	.32
AUG.												
26...	4.0	160	71	.3	27	658	21	.02	2.1	.05	.30	.13
Storm runoff												
NOV. 1995												
01...	5.0	42	29	.1	7.7	216	590	.02	.65	0.12	2.7	1.1
MAR. 1996												
24...	5.2	110	82	.4	11	480	536	.05	.61	.37	1.0	.32
APR.												
22...	--	--	--	--	--	--	864	.04	1.3	.92	4.5	1.3
MAY												
23...	5.5	--	--	--	--	--	390	.06	1.2	.08	2.1	.65
AUG.												
19...	4.8	130	79	.2	22	--	98	.06	1.8	.04	.50	.24
22...	6.7	52	22	.1	9.4	222	720	.03	.74	.04	1.0	.57

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Phos-phorus, dissolved (mg/L as P)	Phos-phorus, ortho, dissolved (mg/L as P)	Coliform, fecal, 0.7 $\mu\text{m-mf}$ (cols/100 mL)	Strepto-cocci, fecal, 0.45 $\mu\text{m-mf}$ (cols/100 mL)	Antimony, total ($\mu\text{g/L}$ as Sb)	Arsenic, total ($\mu\text{g/L}$ as As)	Beryllium, total recoverable ($\mu\text{g/L}$ as Be)	Cadmium, water unfiltered, total ($\mu\text{g/L}$ as Cd)	Chromium, total recoverable ($\mu\text{g/L}$ as Cr)	Copper, total recoverable ($\mu\text{g/L}$ as Cu)	Iron, total recoverable ($\mu\text{g/L}$ as Fe)	Lead, total recoverable ($\mu\text{g/L}$ as Pb)
06820464 Quarry Creek at Missouri River, Fort Leavenworth, Kansas (lat 39°21'13" N, long 94°54'44" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	--	0.10	1,400	2,400	<1	2	<10	<1	<1	2	--	2
AUG. 1995												
10...	0.12	.12	K8,900	2,100	<1	2	<10	<1	1	3	1,000	4
MAR. 1996												
13...	.33	.23	89	135	<1	1	<10	<1	<1	2	110	<1
AUG.												
26...	.11	.13	14,000	12,000	2	2	<10	<1	1	1	540	2
Storm runoff												
NOV. 1995												
01...	.19	.20	--	--	1	4	<10	1	11	25	14,000	50
MAR. 1996												
24...	.27	.26	--	--	1	3	<10	<1	7	16	7,400	30
APR.												
22...	.06	.05	--	--	4	<1	<10	2	19	37	18,000	82
MAY												
23...	.18	.1	--	--	3	4	<10	<1	8	16	7,400	33
AUG.												
19...	.15	.17	--	--	<1	2	<10	<1	4	6	3,200	8
22...	.38	.43	--	--	2	4	<10	1	11	19	14,000	54

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Manganese, total recover- able ($\mu\text{g/L}$ as Mn)	Mercury, total recover- able ($\mu\text{g/L}$ as Hg)	Nickel, total recover- able ($\mu\text{g/L}$ as Ni)	Selenium, total ($\mu\text{g/L}$ as Se)	Silver, total recover- able ($\mu\text{g/L}$ as Ag)	Thallium, dissolved ($\mu\text{g/L}$ as Tl)	Zinc, total recover- able ($\mu\text{g/L}$ as Zn)	Gross alpha, dissolved ($\mu\text{g/L}$ as U-nat)	Gross beta, dissolved (pCi/L as Sr/y-90)	Carbon, organic, total ($\mu\text{g/L}$ as C)	Cyanide, total (mg/L as Cn)	Phenols, total ($\mu\text{g/L}$)
06820464 Quarry Creek at Missouri River, Fort Leavenworth, Kansas (lat $39^{\circ}21'13''$ N, long $94^{\circ}54'44''$ W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	--	<0.10	2	<1	<1	<0.5	20	--		3.2	<0.01	<1
AUG. 1995												
10...	230	<.10	3	1	<1	<.5	20	--	--	3.8	<.01	<1
MAR. 1996												
13...	380	<.10	4	<1	<1	<.5	<10	<3.0	<4.0	5.6	<.01	2
AUG.												
26...	180	<.10	4	<1	<1	<.5	20	--	--	3.6	<.01	2
Storm runoff												
NOV. 1995												
01...	840	.20	18	<1	<1	<.5	180	--	--	23	<.01	3
MAR. 1996												
24...	1,500	<.10	14	<1	<1	<.5	140	--	--	30	<.01	2
APR.												
22...	3,200	--	34	<1	<1	--	230	--	--	31	<.01	5
MAY												
23...	660	<.10	14	<1	<1	--	140	--	--	20	<.01	3
AUG.												
19...	160	.10	6	<1	<1	<.5	40	--	--	7.1	<.01	2
22...	910	<.10	19	<1	<1	--	190	--	--	25	<.01	<1

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Oil and grease, total recoverable, gravimetric (mg/L)	PCB, total (µg/L)	PCN unfiltered recoverable (µg/L)	Chloroform, total (µg/L)	Aroclor, 1,2,5,4-PCB, total (µg/L)	Chlor-dane, total (µg/L)	Chlorpyrifos, total, recoverable (µg/L)	Tetra-chloroethylene, total (µg/L)	p,p'-DDD, unfiltered, recoverable (µg/L)	p,p'-DDD, total (µg/L)	DDE, total (µg/L)	p,p'-DDE, total (µg/L)
06820464 Quarry Creek at Missouri River, Fort Leavenworth, Kansas (lat 39°21'13" N, long 94°54'44" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	<1	<0.10	<0.10	<3.0	<0.1	<0.1	--	<3.0	--	<0.10	--	<0.04
AUG. 1995												
10...	<1	<.10	<.10	<3.0	<.1	<.1	<0.01	<3.0	<0.01	<.10	<0.01	<.04
MAR. 1996												
13...	<1	<.10	<.10	.20	<.1	<.1	<.01	.30	<.01	<.10	<.01	<.04
AUG.												
26...	<1	<.10	<.10	<.20	<.1	<.1	<.01	<.20	.02	<.10	<.01	<.04
Storm runoff												
NOV. 1995												
01...	<1	<.10	<.10	--	<.1	<.1	<.01	--	.03	<.10	.03	.05
MAR. 1996												
24...	<1	<.10	<.10	--	<.1	<.1	<.01	--	<.01	<.10	<.01	<.04
APR.												
22...	<1	<.10	<.10	--	--	--	--	--	--	--	--	--
MAY												
23...	<1	<.10	<.10	--	<.1	.1	--	--	--	<.10	--	.11
AUG.												
19...	<1	<.10	<.10	--	--	--	--	--	--	--	--	--
22...	3	<.10	<.10	--	<.1	<.1	<.01	--	.06	.10	.05	.11

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	<i>p,p'</i> -DDT, unfiltered, recover- able ($\mu\text{g/L}$)	<i>p,p'</i> -DDT, total ($\mu\text{g/L}$)	Diazinon total ($\mu\text{g/L}$)	Dieldrin, total ($\mu\text{g/L}$)	Heptachlor, total ($\mu\text{g/L}$)	Malathion, total ($\mu\text{g/L}$)	2,4-D, total ($\mu\text{g/L}$)	2,4-DP, total ($\mu\text{g/L}$)	Atrazine, water, dissolved, recover- able ($\mu\text{g/L}$)	Deethyl- atrazine, water, dissolved, recover- able ($\mu\text{g/L}$)	Prometon, water, dissolved, recover- able ($\mu\text{g/L}$)	Simazine, water, dissolved, recover- able ($\mu\text{g/L}$)
06820464 Quarry Creek at Missouri River, Fort Leavenworth, Kansas (lat 39°21'13" N, long 94°54'44" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	--	<0.10	--	<0.02	<0.03	--	--	--	--	--	--	--
AUG. 1995												
10...	<0.01	<.10	<0.01	<.02	<.03	0.01	<0.01	<0.01	--	--	--	--
MAR 1996												
13...	<.01	<.10	<.01	<.02	<.03	<.01	<.01	<.01	--	--	--	--
AUG.												
26...	<.01	<.10	<.01	<.02	<.03	<.01	<.01	<.01	0.007	E0.003	0.35	0.20
Storm runoff												
NOV. 1995												
01...	.03	0.10	<.01	<0.02	<.03	.08	.05	<.01	--	--	--	--
MAR. 1996												
24...	<.01	<.01	<.01	<.02	<.03	<.01	.03	<.01	--	--	--	--
APR.												
22...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
23...	--	.30	<.01	.02	.03	--	--	--	--	--	--	--
AUG.												
19...	--	--	--	--	--	--	--	--	--	--	--	--
22...	.10	.40	<.01	<.02	<.03	.12	<.01	<.01	--	--	--	--

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Time (24-hour)	Dis- charge, instant- aneous (cubic feet per second)	Specific conduct- ance (µS/cm)	Specific conduct- ance, laboratory (µS/cm)	pH, water whole, field (standard units)	pH, water whole, laboratory (standard units)	Temper- ature, water (°C)	Alkalinity, laboratory (mg/L as CaCO ₃)	Oxygen demand, chemical, high level (mg/L)	Calcium, dissolved (mg/L as Ca)	Magne- sium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
06820468 Unnamed tributary at Stimson Avenue, Fort Leavenworth, Kansas (lat 39°20'50" N, long 94°54'42" W, fig. 2)												
<u>Low flow</u>												
SEPT. 1994												
14...	1430	0.10	846	--	7.7	--	22.0	208	33	99	26	42
AUG. 1995												
10...	1035	.18	650	648	6.9	7.3	22.5	151	15	71	18	30
MAR. 1996												
28...	1400	.14	853	873	7.4	7.1	11.5	210	100	68	21	66
AUG.												
26...	1315	.47	500	503	7.7	7.4	24.5	128	20	60	12	19
<u>Storm runoff</u>												
MAY 1995												
27...	0540	--	180	187	5.9	6.9	--	36	30	20	3.2	5.3
JUNE												
28...	0545	--	258	242	6.8	7.7	--	64	29	--	--	--
JULY												
19...	2305	--	142	168	7.0	7.6	--	50	27	15	3.0	4.8
MAY 1996												
04...	0500	--	--	--	--	--	--	--	52	--	--	--
JUNE												
13...	0310	--	--	94	--	7.0	--	32	38	8.7	.82	1.3
JULY												
28...	0505	--	--	92	--	7.0	--	37	51	7.8	.87	1.4
<u>Duplicate</u>												
AUG. 1996												
26...	1320	.47	500	504	7.7	7.4	24.5	128	17	59	12	18
<u>Blanks</u>												
QC-1	1130	--	--	2	--	6.5	--	1.2	--	.11	.01	<.20
QC-2	1235	--	--	3	--	7.7	--	1.8	<10	.04	<.01	<.20
QC-3	1130	--	--	4	--	8.4	--	1.6	<10	.03	<.01	<.20
QC-4	1230	--	--	2	--	6.9	--	1.5	<10	<.02	<.01	<.20

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Potassium, dissolved (mg/L as K)	Sulfate, dissolved (mg/L as SO ₄)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO ₂)	Solids, residue at 180 °C dissolved (mg/L)	Residue total at 105 °C, suspended (mg/L)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, nitrite plus nitrate, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phosphorus, total (mg/L as P)
06820468 Unnamed tributary at Stimson Avenue, Fort Leavenworth, Kansas (lat 39°20'50" N, long 94°54'42" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	4.6	130	72	0.4	28	564	6	0.13	3.1	0.06	0.50	0.20
AUG. 1995												
10...	3.8	88	52	.3	21	436	10	.19	2.5	.13	.60	.26
MAR. 1996												
28 ¹ ...	7.7	130	72	.5	17	530	6	.14	.98	1.7	8.2	2.0
AUG.												
26...	3.9	63	37	.2	7.9	298	6	.05	1.3	.12	.60	.22
Storm runoff												
MAY 1995												
27...	2.8	13	20	<.1	5.5	115	76	.02	.27	.20	.80	.25
JUNE												
28...	--	23	16	<.1	7.8	142	108	.02	.30	.17	1.0	.19
JULY												
19...	3.3	11	10	<.1	4.9	102	385	.03	.30	.07	1.0	.40
MAY 1996												
04...	--	--	--	--	--	--	211	.02	.47	.65	2.7	.64
JUNE												
13...	2.0	4.0	1.9	<.1	1.6	50	450	.04	.63	.48	1.2	.30
JULY												
28...	1.6	3.8	2.1	<.1	1.2	46	594	.01	.54	.37	.80	.14
Duplicate												
AUG. 1996												
26...	4.0	63	37	.2	7.7	290	5	.05	1.3	.12	.60	.22
Blanks												
QC-1	<.10	<.10	<.10	<.10	.50	<1	3	<.01	<.05	<.01	<.20	<.01
QC-2	<.10	<.10	<.10	<.10	.30	<1	6	<.01	<.05	<.01	<.20	<.01
QC-3	<.10	<.10	<.10	<.10	.50	<1	<1	<.01	<.05	<.01	<.20	<.01
QC-4	<.10	<.10	<.10	<.10	.10	<1	<1	<.01	<.05	<.01	<.20	<.01

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Phos-phorus, dissolved (mg/L as P)	Phos-phorus, ortho, dissolved (mg/L as P)	Coliform, fecal, 0.7 $\mu\text{m-mf}$ (cols/100 mL)	Strepto-cocci, fecal, 0.45 $\mu\text{m-mf}$ (cols/100 mL)	Antimony, total ($\mu\text{g/L}$ as Sb)	Arsenic, total ($\mu\text{g/L}$ as As)	Beryllium, total recoverable ($\mu\text{g/L}$ as Be)	Cadmium, water unfiltered, total ($\mu\text{g/L}$ as Cd)	Chromium, total recoverable ($\mu\text{g/L}$ as Cr)	Copper, total recoverable ($\mu\text{g/L}$ as Cu)	Iron, total recoverable ($\mu\text{g/L}$ as Fe)	Lead, total recoverable ($\mu\text{g/L}$ as Pb)
06820468 Unnamed tributary at Stimson Avenue, Fort Leavenworth, Kansas (lat 39°20'50" N, long 94°54'42" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	--	0.18	2,100	6,100	1	6	<1	<1	<1	4	--	<1
AUG. 1995												
10...	.23	.24	K8,100	5,400	<1	4	<1	<1	1	1	210	<1
MAR. 1996												
28...	.49	1.1	K2,500,000	42,000	1	3	<1	<1	<1	4	370	1
AUG.												
26...	.23	.23	15,000	7,400	1	4	<1	<1	<1	1	260	1
Storm runoff												
MAY 1995												
27...	.17	.18	--	--	--	--	<1	<1	--	--	--	--
JUNE												
28...	.12	.11	--	--	<1	3	<1	<1	2	5	2,700	17
JULY												
19...	.28	.29	>6,000	>10,000	<1	3	<1	<1	7	11	7,600	52
MAY 1996												
04...	.21	.13	--	--	--	2	<1	<1	5	11	3,500	35
JUNE												
13...	.12	.12	--	--	3	3	<1	<1	6	8	8,500	43
JULY												
28...	.09	.11	--	--	2	3	<1	<1	8	7	52,000	68
Duplicate												
AUG. 1996												
26...	.19	.22	--	--	1	4	<1	<1	<1	<1	270	<1
Blanks												
QC-1	<.01	<.01	--	--	<1	<1	<10	<1	<1	<1	20	<1
QC-2	<.01	<.01	--	--	<1	<1	<10	<1	<1	<1	30	<1
QC-3	<.01	<.01	--	--	<1	<1	<10	<1	<1	<1	30	<1
QC-4	<.01	<.01	--	--	<1	<1	<10	<1	<1	<1	<10	<1

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Manganese, total recover- able ($\mu\text{g/L}$ as Mn)	Mercury, total recover- able ($\mu\text{g/L}$ as Hg)	Nickel, total recover- able ($\mu\text{g/L}$ as Ni)	Selenium, total ($\mu\text{g/L}$ as Se)	Silver, total recover- able (mg/L as Ag)	Thallium, dissolved ($\mu\text{g/L}$ as Tl)	Zinc, total recover- able ($\mu\text{g/L}$ as Zn)	Gross alpha, dissolved ($\mu\text{g/L}$ as U-nat)	Gross beta, dissolved (pCi/L as SR/Y-90)	Carbon, organic, total ($\mu\text{g/L}$ as C)	Cyanide, total (mg/L as Cn)	Phenols, total ($\mu\text{g/L}$)
06820468 Unnamed tributary on Stimson Avenue, Fort Leavenworth, Kansas (Lat 39°20'50" N Long 94°54'42" W)—Continued												
Low flow												
SEPT. 1994												
14...	--	<0.10	2	<1	<1	<0.5	<10	--	--	4.2	<0.01	<1
AUG. 1995												
10...	200	<.10	2	<1	<1	<.5	<10	--	--	--	<.01	<1
MAR. 1996												
28...	920	<.10	3	<1	<1	<.5	20	<3.0	7.9	29	<.01	5
AUG.												
26...	190	<.10	2	<1	<1	<.5	<10	--	--	6.3	<.01	<1
Storm runoff												
MAY 1995												
27...	--	--	--	<1	<1	<.5	--	--	--	7.9	<.01	1
JUNE												
28...	450	<.10	5	<1	<1	<.5	40	--	--	7.9	<.01	<1
JULY												
19...	810	.20	14	<1	<1	<.5	110	--	--	8.6	<.01	5
MAY 1996												
04...	310	<.10	6	<1	<1	--	100	--	--	14	.01	--
JUNE												
13...	380	<.10	9	<1	<1	<.5	90	--	--	10	<.01	<1
JULY												
28...	740	<.10	14	<1	<1	<.5	140	--	--	19	<.01	<1
Duplicate												
AUG. 1996												
26...	190	<.10	2	<1	<1	<.5	<.5	--	--	--	--	<1
Blanks												
QC-1	10	.30	<1	<1	<1	<.5	<10	--	--	.30	<.01	<1
QC-2	<10	<.10	<1	<1	<1	<.5	<10	--	--	.40	<.01	<1
QC-3	<10	<.10	<1	<1	<1	<.5	<10	--	--	.90	<.01	<1
QC-4	<10	<.10	<1	<1	<1	<.5	<10	--	--	.20	--	<1

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Oil and grease, total recoverable, gravi-metric (mg/L)	PCB, total (µg/L)	PCN, unfiltered, recoverable (µg/L)	Chloroform, total (µg/L)	Aroclor, 1,2,5,4-PCB, total (µg/L)	Chlor-dane, total (µg/L)	Chlor-pyrifos, total recoverable (µg/L)	Tetra-chloroethylene, total (µg/L)	p,p'-DDD, unfiltered, recoverable (µg/L)	p,p'-DDD, total (µg/L)	DDE, total (µg/L)	p,p'-DDE, total (µg/L)
06820468 Unnamed tributary on Stimson Avenue, Fort Leavenworth, Kansas (Lat 39°20'50" N Long 94°54'42" W)—Continued												
Low flow												
SEPT. 1994												
14...	<1	--	<0.10	<3.0	<0.1	<0.10	--	<3.0	--	<0.1	--	<0.1
AUG. 1995												
10...	<1	<0.10	<.10	<3.0	<.1	<.10	<0.01	<3.0	<0.01	<.1	<0.01	<.1
MAR. 1996												
28...	5	.20	<.10	<.50	<.1	<.10	.02	<.20	<.01	<.1	<.01	<.1
AUG.												
26...	3	<.10	<.10	<.20	<.1	<.10	<.01	<.20	<.01	<.1	<.01	<.1
Storm runoff												
MAY 1995												
27...	<1	--	<.10	--	<.2	<.20	<.01	--	--	<.2	--	<.8
JUNE												
28...	<1	<.10	<.10	--	<.1	<.10	<.02	--	<.01	<.1	<.01	<.4
JULY												
19...	<1	<.10	<.10	<3.0	<.1	.10	.02	<3.0	.01	<.1	.01	<.4
MAY 1996												
04...	--	--	<.10	<.20	--	--	--	<.20	--	--	--	--
JUNE												
13...	11	<.10	<.10	--	<.1	<.10	<.01	--	<.01	<.1	.02	<.4
JULY												
28...	<1	<.10	<.10	<.20	--	<.10	.05	<.20	<.01	--	.04	--
Duplicate												
AUG. 1996												
26...	18	<.10	<.10	<.20	<.1	2.5	<.01	<.20	<.01	<.1	<.01	<.1
Blanks												
QC-1	<1	<.10	<.10	--	<.1	<.10	<.01	--	<.01	<.1	<.01	<.04
QC-2	<1	<.10	<.10	--	<.1	<.10	<.01	--	<.01	<.1	<.01	<.04
QC-3	<1	<.10	<.10	<3.0	<.1	<.10	<.01	<3.0	<.01	<.1	<.01	<.04
QC-4	2	<.10	<.10	--	<.1	<.10	<.01	--	<.01	<.1	<.01	<.04

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	<i>p,p'</i> -DDT, unfiltered, recover- able ($\mu\text{g/L}$)	<i>p,p'</i> -DDT, total ($\mu\text{g/L}$)	Diazinon, total ($\mu\text{g/L}$)	Dieldrin, total ($\mu\text{g/L}$)	Heptachlor, total ($\mu\text{g/L}$)	Malathion, total ($\mu\text{g/L}$)	2,4-D, total ($\mu\text{g/L}$)	2,4-DP, total ($\mu\text{g/L}$)	Atrazine, water, dissolved, recover- able ($\mu\text{g/L}$)	Deethyl- atrazine, water, dissolved, recover- able ($\mu\text{g/L}$)	Prometon, water, dissolved, recover- able ($\mu\text{g/L}$)	Simazine, water, dissolved, recover- able ($\mu\text{g/L}$)
06820468 Unnamed tributary at Stimson Avenue, Fort Leavenworth, Kansas (lat 39°20'50" N, long 94°54'42" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
14...	--	<0.1	--	<0.02	<0.02	--	--	--	--	--	--	--
AUG. 1995												
10...	<.01	<.1	<0.01	<.02	<.02	0.01	.06	<0.01	--	--	--	--
MAR. 1996												
28...	<.01	<.1	<.01	<.02	<.02	<.01	<.01	<.01	--	--	--	--
AUG.												
26...	<.01	<.1	<.01	<.02	<.02	<.01	.06	<.01	0.01	<0.002	9.18	2.98
Storm runoff												
MAY 1995												
27...	--	<.2	.04	<.02	<.03	<.01	.08	.04	--	--	--	--
JUNE												
28...	<.01	<.1	<.02	<.02	<.03	.75	.07	<.01	--	--	--	--
JULY												
19...	.01	<.1	<.01	<.02	<.03	2.6	.05	<.01	--	--	--	--
MAY 1996												
04...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
13...	.02	<.1	<.01	<.02	<.03	1.5	.64	<.01	--	--	--	--
JULY												
28...	.02	--	<.01	<.01	<.01	.31	.12	<.01	--	--	--	--
Duplicate												
AUG. 1996												
26...	<.01	<.1	<.01	<.02	<.02	<.01	.04	<.01	.01	<.002	9.06	2.97
Blanks												
QC-1	<.10	--	<.01	<.01	<.03	<.01	<.01	<.01	--	--	--	--
QC-2	<.10	--	<.01	<.01	<.03	<.01	<.01	<.01	--	--	--	--
QC-3	<.10	<3.0	<.01	<.01	<.03	<.01	<.01	<.01	--	--	--	--
QC-4	<.10	--	<.01	<.01	<.03	<.01	<.01	<.01	--	--	--	--

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Time (24-hour)	Discharge, instantaneous (cubic feet per second)	Specific conduct- ance (µS/cm)	Specific conduct- ance, laboratory (µS/cm)	pH, water whole, field (standard units)	pH, water whole, laboratory (standard units)	Temper- ature, water (°C)	Alkalinity, laboratory (mg/L as CaCO ₃)	Oxygen demand, chemical, high level (mg/L)	Calcium, dissolved (mg/L as Ca)	Magne- sium, dissolved (mg/L as Mg)	Sodium, dissolved (mg/L as Na)
06820472 Corral Creek at Fort Leavenworth, Kansas (lat 39°20'09" N, long 94°55'01" W, fig. 2)												
Low flow												
SEPT. 1994												
15...	1110	0.15	710	--	7.6	--	24.0	163	44	63	17	46
AUG. 1995												
09...	1240	.33	733	724	7.4	7.2	28.5	184	27	76	16	41
MAR. 1996												
28...	1145	.24	750	761	7.7	7.8	5.5	157	15	67	18	60
AUG.												
26...	1455	.74	625	620	7.9	7.8	23.5	191	<10	30	15	23
Storm runoff												
JUNE 1995												
28...	0625	--	182	188	7.0	7.4	--	64	82	--	--	--
AUG.												
15...	2215	--	140	177	7.1	7.4	--	70	79	16	2.8	5.3
NOV.												
01...	0850	--	239	250	7.3	7.5	--	84	55	21	4.2	10
MAR. 1996												
24...	1600	--	412	438	7.6	7.5	--	107	140	31	6.9	31
APR.												
22...	0005	--	416	439	7.7	7.5	--	118	160	35	8.0	28
MAY												
04...	0515	--	--	306	--	7.4	--	89	98	25	5.6	17
23...	0345	--	365	413	7.7	7.1	--	--	110	36	7.5	18
JUNE												
13...	0330	--	--	296	--	7.3	--	102	120	29	4.7	8.2
AUG.												
16...	1545	--	--	372	--	7.3	--	111	59	42	7.9	15
Duplicate												
AUG. 1995												
09...	1245	.30	733	725	7.4	7.3	28.5	184	27	78	17	43

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Potassium, dissolved (mg/L as K)	Sulfate, dissolved (mg/L as SO_4)	Chloride, dissolved (mg/L as Cl)	Fluoride, dissolved (mg/L as F)	Silica, dissolved (mg/L as SiO_2)	Solids, residue at 180 °C dissolved (mg/L)	Residue total at 105 °C, suspended (mg/L)	Nitrogen, nitrite, dissolved (mg/L as N)	Nitrogen, nitrite plus nitrate, dissolved (mg/L as N)	Nitrogen, ammonia, dissolved (mg/L as N)	Nitrogen, ammonia plus organic, total (mg/L as N)	Phos- phorus, total (mg/L as P)
06820472 Corral Creek at Fort Leavenworth, Kansas (lat 39°20'09" N, long 94°55'01" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
15...	7.7	98	47	0.4	16	434	49	0.01	0.14	0.16	2.5	0.36
AUG. 1995												
09...	6.8	100	55	.4	17	438	92	.01	.28	.07	2.1	.24
MAR. 1996												
28...	4.0	110	79	.4	11	472	9	<.01	.14	.02	.30	.08
AUG.												
26...	4.6	72	39	.3	19	382	<1	<.01	.49	.02	.20	.14
Storm runoff												
JUNE 1995												
28...	--	15	7.9	<.1	4.6	100	652	.02	.58	.29	.80	.23
AUG.												
15...	3.4	12	6.2	.1	4.0	82	3,040	.01	.30	.07	2.3	1.2
NOV.												
01...	4.0	22	10	.2	4.5	142	1,380	.01	.23	.08	2.2	1.0
MAR. 1996												
24...	3.6	48	44	.4	5.7	234	1,860	.02	.52	.16	.80	.26
APR.												
22...	4.0	53	35	.3	5.4	236	2,600	.03	.70	.37	5.5	1.8
MAY												
04...	2.6	27	20	.2	4.3	170	924	.02	.49	.16	2.3	.78
23...	4.2	--	--	--	--	224	734	.03	.57	.03	1.8	.50
JUNE												
13...	3.1	25	13	.2	6.8	154	3,360	.04	.65	.17	.90	.32
AUG.												
16...	3.6	41	18	.2	9.5	210	258	.02	.52	.02	1.0	.40
Duplicate												
AUG. 1995												
09...	6.7	100	53	.3	17	460	92	.02	.30	.08	1.9	.26

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Phos-phorus, dissolved (mg/L as P)	Phos-phorus, ortho, dissolved (mg/L as P)	Coliform, fecal, 0.7 $\mu\text{m}\text{-mf}$ (cols/100 mL)	Strepto-cocci, fecal 0.45 $\mu\text{m}\text{-mf}$ (cols/100 mL)	Antimony, total ($\mu\text{g/L}$ as Sb)	Arsenic, total ($\mu\text{g/L}$ as As)	Beryllium, total recoverable ($\mu\text{g/L}$ as Be)	Cadmium, water unfiltered, total ($\mu\text{g/L}$ as Cd)	Chromium, total recoverable ($\mu\text{g/L}$ as Cr)	Copper, total recoverable ($\mu\text{g/L}$ as Cu)	Iron, total recoverable ($\mu\text{g/L}$ as Fe)	Lead, total recoverable ($\mu\text{g/L}$ as Pb)
06820472 Corral Creek at Fort Leavenworth, Kansas (lat 39°20'09" N, long 94°55'01" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
15...	--	0.09	24,000	6,700	1	6	<10	<1	3	5	--	8
AUG. 1995												
09...	0.17	.15	K14,000	K3,400	<1	3	<10	<1	2	4	3,400	5
MAR. 1996												
28...	.07	.06	K67	<1,500	1	1	<10	<1	<1	2	430	1
AUG.												
26...	.12	.15	1,900	1,500	<1	2	<10	<1	<1	<1	100	<1
Storm runoff												
JUNE 1995												
28...	.17	.16	--	--	<1	3	<10	1	13	20	17,000	40
AUG.												
15...	.18	.19	--	--	4	5	<10	--	--	--	--	--
NOV.												
01...	.25	.21	--	--	1	5	<10	2	20	22	27,000	79
MAR. 1996												
24...	.08	.08	--	--	5	4	<10	2	34	41	31,000	88
APR.												
22...	.11	.11	--	--	7	6	<10	3	34	42	35,000	100
MAY												
04...	.09	.08	--	--	3	4	<10	1	20	21	15,000	45
23...	.18	.07	--	--	--	2	<10	<1	14	16	12,000	35
JUNE												
13...	.10	.10	--	--	9	7	<10	3	39	58	69,000	110
AUG.												
16...	.12	.13	--	--	1	3	<10	<1	7	10	6,100	15
Duplicate												
AUG. 1995												
09...	.14	.15	K15,000	3,600	<1	3		<1	3	5	3,400	4

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Manganese, total recover- able ($\mu\text{g/L}$ as Mn)	Mercury, total recover- able ($\mu\text{g/L}$ as Hg)	Nickel, total recover- able ($\mu\text{g/L}$ as Ni)	Selenium, total ($\mu\text{g/L}$ as Se)	Silver, total recover- able ($\mu\text{g/L}$ as Ag)	Thallium, dissolved ($\mu\text{g/L}$ as Tl)	Zinc, total recover- able ($\mu\text{g/L}$ as Zn)	Gross alpha, dissolved ($\mu\text{g/L}$ as U-Nat)	Gross beta, dissolved (pCi/L as SR/Y-90)	Carbon, organic, total ($\mu\text{g/L}$ as C)	Cyanide, total (mg/L as Cn)	Phenols, total ($\mu\text{g/L}$)
06820472 Corral Creek at Fort Leavenworth, Kansas (lat $39^{\circ}20'09''$ N, long $94^{\circ}55'01''$ W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
15...	--	<0.10	16	<1	<1	<0.5	40	--	--	10	<0.01	15
AUG. 1995												
09...	570	<.10	7	<1	<1	<.5	20	--	--	5.9	<.01	7
MAR. 1996												
28...	230	<.10	3	<1	<1	<.5	10	6.5	<4.0	3.7	<.01	<1
AUG.												
26...	60	<.10	3	<1	<1	<.5	<10	--	--	3.9	<.01	<1
Storm runoff												
JUNE 1995												
28...	1,600	<.10	31	<1	<1	<.5	160	--	--	16	<.01	<1
AUG.												
15...	--	.20	--	<5	<1	<.5	--	--	--	14	<.01	<1
NOV.												
01...	2,500	<.10	42	<1	<1	<.5	250	--	--	56	<.01	3
MAR. 1996												
24...	1,900	<.10	45	1	<1	<.5	320	--	--	56	<.01	--
APR.												
22...	2,500	<.10	66	<1	<1	<.5	390	6.8	4.2	54	<.01	4
MAY												
04...	2,600	<.10	26	<1	<1	<.5	180	<3.0	4.9	25	.01	3
23...	1,100	<.10	24	<1	<1	--	190	3.1	<4.0	35	<.01	2
JUNE												
13...	2,300	<.10	65	1	<1	<.5	380	--	--	32	<.01	<1
AUG.												
16...	410	.10	10	<1	<1	<.5	80	--	--	15	<.01	<1
Duplicate												
AUG. 1995												
09...	570	.20	8	<1	<1	<.5	20	--	--	5.6	<.01	7

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	Oil and grease, total recoverable, gravimetric (mg/L) (00556)	PCB, total (µg/L)	PCN, unfiltered, recoverable (µg/L)	Chloroform, total (µg/L)	Aroclor, 1,2,5,4-PCB, total (µg/L)	Chlor-dane, total (µg/L)	Chlor-pyrifos, total recoverable (µg/L)	Tetra-chloroethylene, total (µg/L)	p, p'-DDD, unfiltered, recoverable (µg/L)	p, p'-DDD, total (µg/L)	DDE, total (µg/L)	p, p'-DDE, total (µg/L)
06820472 Corral Creek at Fort Leavenworth, Kansas (lat 39°20'09" N, long 94°55'01" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
15...	<1	--	<0.10	<3.0	<0.10	<0.10	--	<3.0	--	<0.1	--	<0.04
AUG. 1995												
09...	<1	<0.10	<.10	<3.0	<.10	<.10	<0.01	<3.00	<0.01	<.1	<0.01	<.04
MAR. 1996												
28...	<1	<.10	<.10	.40	<.10	<.10	<.01	<.20	<.01	<.1	.01	<.04
AUG.												
26...	<1	<.10	<.10	<.20	<.10	<.10	<.01	<.20	<.01	<.1	.01	<.04
Storm runoff												
JUNE 1995												
28...	<1	<.10	<.10	--	<.10	<.10	<.02	--	.01	<.1	<.01	<.04
AUG.												
15...	<1	<.10	<.10	--	<.10	<.10	.09	--	<.01	<.1	<.01	<.04
NOV.												
01...	<1	<.10	<.10	--	<.10	.90	.01	--	.04	<.1	.01	<.04
MAR. 1996												
24...	--	<.10	<.10	--	<.10	.10	.02	--	.01	--	.01	--
APR.												
22...	2	<.10	<.10	--	<.10	.10	.01	--	<.01	<.1	<.01	<.04
MAY												
04...	<1	<.20	<.10	--	<.10	.20	E.01	<.20	<.02	<.1	<.02	<.04
23...	<1	<.10	<.10	--	<.10	.10	.01	--	<.01	<.1	<.01	<.04
JUNE												
13...	4	<.20	<.10	-	.10	.30	.01	--	<.02	<.1	.01	<.04
AUG.												
16...	<1	<.10	<.10	--	<.10	.20	<.01	--	<.01	<.1	<.01	<.04
Duplicate												
AUG. 1995												
09...	<1	<.10	<.10	<3.0	<.010	<.10	<.01	<.20	<.01	<.1	<.01	<.04

Table 8. Physical properties and selected water-quality constituent concentrations in samples collected during low flow and storm runoff at sampling sites at Fort Leavenworth, Kansas, 1994–96—Continued

Date	<i>p, p'</i> -DDT, unfiltered, recover- able ($\mu\text{g/L}$)	<i>p, p'</i> - DDT, total ($\mu\text{g/L}$)	Diazinon, total ($\mu\text{g/L}$)	Dieldrin, total ($\mu\text{g/L}$)	Hepta- chlor, total ($\mu\text{g/L}$)	Malathion, total ($\mu\text{g/L}$)	2,4-D, total ($\mu\text{g/L}$)	2,4-DP, total ($\mu\text{g/L}$)	Atrazine, water, dissolved, recover- able ($\mu\text{g/L}$)	Deethyl- atrazine, water, dissolved, recover- able ($\mu\text{g/L}$)	Prometon, water, dissolved, recover- able ($\mu\text{g/L}$)	Simazine, water, dissolved, recover- able ($\mu\text{g/L}$)
06820472 Corral Creek at Fort Leavenworth, Kansas (lat 39°20'09" N, long 94°55'01" W, fig. 2)—Continued												
Low flow												
SEPT. 1994												
15...	--	<0.1	--	<0.02	<0.03	--	--	--	--	--	--	--
AUG. 1995												
09...	<0.01	<.1	<0.01	<.02	<.03	<0.01	0.01	<.01	--	--	--	--
MAR. 1996												
28...	<.01	<.1	<.01	<.02	<.03	<.01	.02	<.01	--	--	--	--
AUG.												
26...	<.01	<.1	<.01	<.02	<.03	<.01	<.01	<.01	0.007	E0.003	0.05	0.01
Storm runoff												
JUNE 1995												
28...	<.01	<.1	.44	<.02	<.03	.69	.69	<.01	--	--	--	--
AUG.												
15...	.02	<.1	.10	<.02	<.03	.06	.60	<.01	--	--	--	--
NOV.												
01...	.01	<.1	.01	<.02	.05	.01	.04	<.01	--	--	--	--
MAR. 1996												
24...	.01	--	<.01	<.02	<.01	.01	.15	<.01	--	--	--	--
APR.												
22...	<.01	<.1	.07	<.02	<.03	<.03	1.9	E.060	--	--	--	--
MAY												
04...	<.02	<.1	.02	<.02	<.03	<.02	1.2	.08	--	--	--	--
23...	<.01	<.1	E.17	<.02	<.03	<.01	9.8	.26	--	--	--	--
JUNE												
13...	.02	<.1	.01	<.02	<.03	.15	.78	<.01	--	--	--	--
AUG.												
16...	<.01	<.1	.02	<.02	<.03	.14	.06	<.01	--	--	--	--
Duplicate												
AUG. 1995												
09...	<.01	<.01	<.01	<.01	<.03	<.01	.03	<.01	--	--	--	--

¹Sample was affected by broken sewer pipe.